



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,708	09/16/2005	Kentaro Takesada	5404/120	6143

757 7590 02/04/2008
BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, IL 60610

EXAMINER

ZIMMER, MARC S

ART UNIT	PAPER NUMBER
----------	--------------

1796

MAIL DATE	DELIVERY MODE
-----------	---------------

02/04/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/549,708

Applicant(s)

TAKESADA ET AL.

Examiner

Marc S. Zimmer

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-12 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-17 is/are allowed.
- 6) ☒ Claim(s) 6-12 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

The Examiner had earlier indicated that claims 6-12 and 15-17 were allowable. Predicated on this statement of patentability, Applicant simply cancelled most of the rejected claims, and re-wrote claims 6 and 15-17 in independent form.

Unfortunately, it appears that when the Examiner had been attempting to ascertain the patentability of these claims, his search strategy failed to capture two additional references that would appear to be commonly assigned and are germane to the remaining claims. The Examiner sincerely regrets any inconvenience this may have caused the Applicants.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 6-12, 16, and 18-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Taniguchi et al., WO 2004/013192. U.S. Patent # 7,309,736 is relied upon as a faithful translation of this reference into the English language and all citation of column and line will be that for the U.S. patent.

First, Taniguchi teaches an identical block copolymer. See the abstract, column 3, lines 42-67, column 9, lines 55-57, Production Example 5. The synthetic approach is, likewise, the same (column 17, lines 18-28). Further, it is contemplated that the acrylic block copolymer shall be mixed with one or more of the materials mentioned in column 4, lines 6-11, particularly when it is mixed with a thermoplastic, including a crosslinked

rubber. Exemplary of this component are core-shell rubbers in light of their compatibility with the acrylic host (column 25, lines 63-67) and acrylic-silicone rubber graft copolymer represents one permutation of the core-shell rubbers (column 26, lines 34-36).

As an aside, it is appreciated that a multitude of crosslinked rubbers are mentioned in column 26, the aforementioned acrylic-silicone rubber graft copolymer being one of perhaps two or three dozen. Nevertheless, when the species of a genus, the genus in this case being a crosslinked rubber, is clearly named, the species claim is anticipated no matter how many other species are additionally named. *Ex parte A*, 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990) (The claimed compound was named in a reference which also disclosed 45 other compounds. The Board held that the comprehensiveness of the listing did not negate the fact that the compound claimed was specifically taught. The Board compared the facts to the situation in which the compound was found in the Merck Index, saying that "the tenth edition of the Merck Index lists ten thousand compounds. In our view, each and every one of those compounds is described' as that term is used in 35 U.S.C. § 102(a), in that publication."). *Id.* at 1718.

Concerning claim 15, the reference mentions a commercially-available embodiment of the graft copolymer component. The Examiner had attempted to locate information on the internet from which the structure or makeup of the polymer could be gleaned but none appeared to be available.

Claims 6, 9-10, 12, and 19-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Kakeda et al., WO 02/092696. U.S. Patent # 7,282,535 is relied upon as a faithful translation of this reference into the English language and all citation of column and line will be that for the U.S. patent. A most fundamental incarnation of the prior art invention is one wherein an equivalent acrylic block copolymer is blended with a thermoplastic (abstract). It is further considered that various other blending agents, such as a silicone-acrylic graft copolymer (column 31, lines 48-49) may be added. The teachings most relevant to the claim limitations of claims 9, 10, and 12 can be found at column 10, lines 26-29, column 15, lines 41-49, and column 23, lines 1-3.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 11, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kakeda et al., WO 02/092696. As an additional monomer to contribute to the makeup of the acrylic copolymer, Kakeda advocates using a monomer bearing, among others, carboxyl groups and acid anhydride groups according to column 8, lines 31-34. Obvious among these would be acrylic acid which furnishes the unit C2 or an anhydride containing polymerizable moieties.

Concerning claim 11, column 15, lines 41-49 delineate what are the properties that are beneficially affected by using each of the monomers mentioned in claim 11.

The skilled artisan will, as a matter of routine experimentation, vary the ratio of these materials so as to simultaneously modify all of impact resistance, oil resistance, and low-temperature performance.

As for claim 18, column 28, lines 44-48 contemplate embodiments where the thermoplastic and acrylic polymer are provided in equal amounts by weight. Further, the quantity of filler disclosed in column 31, lines 64-65 is consistent with that advocated by Applicant. With respect to the lubricant, no specified amount is stated but the skilled artisan is absolutely capable of determining how much of this and other adjuvants to incorporate.

Allowable Subject Matter

Claims 15-17 are allowable. It could not be confirmed that the commercial silicone-acrylate graft copolymer mentioned in both disclosures, i.e. Metablen S-2001, satisfied the limitations provided in claims 15 and 16.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is rejected on the ground of nonstatutory double patenting over claim 1 of U. S. Patent No. 7,282,535 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter. The block copolymer presently claimed encompasses the more precisely defined corresponding block copolymer of co-pending claim 1. Further, the addition of an acrylic-silicone graft copolymer to the invention of co-pending claim 1 is obvious in light of its express mention as a potential blending agent in column 31.

It should be said that the present claims also embrace the presence of a thermoplastic resin given Applicant's employment of the transitional phrase "comprising".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 571-272-1096. The examiner can normally be reached on Monday-Friday 8:30-5:00.


Application/Control Number:
10/549,708
Art Unit: 1796

Page 7

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 9, 2008


MARC S. ZIMMER
PRIMARY EXAMINER